RECEIVED

NOV 28 2000

FECH CENTER 1600/2900



Statement Filed Pursuant to the Duty of Disclosure (6pgs);

Fransmittal Letter

ડાં છ

The Patent and Trademark Office stamping sets forth the receipt date Attorney Docket: Examiner: (or both the receipt date and the Serial Number) Art Unit: of a patent application identified as follows: Combinatorial Biology January 5, 2000 Jarrell, et al. 09/478,263 Filing Date: Serial No.:

Applicant:

· Date Filed: November 8, 2000

Form PTO-1449 (16pgs); Return Postcard Cited Art; and

Attorney: BHJ

3189723_1.DOC

Form PTO-1449 U.S. Department of Commerce (REV-83) Patent and Trademark Office INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Atty. Docket: 0342941-0043 (HU01594-99/BU98-

3-

In re Application No.: 09/478,263

RECEIVE

NOV 25 2000

Applicant: Jarrell, et al.

Filing Date:

63)

Group:

	116		Timing Date.	Croup.	
			January 5, 2000	1	LINIER 250 77
	NT DOCUMENTS				
Examiner's	U.S. Patent No.	Applicant	Issue Date	Class	Subclass
Initials					
	4,661,450	Kempe et al.	April 28, 1997	435	172.3
OIPE	4,935,357	Szybalski	June. 19, 1990		
	4 ,987,071	Cech et al.	January 22, 1991	435	91
MOV 2 & 2000	5,093,246	Cech et al.	March 3, 1992	435	91
R	\$5,116,742 \$5,180,818 5,270,185 5,432,263	Cech et al.	May 26, 1992	435	91
CHA CH	[₹] 5,180,818	Cech et al.	January 19, 1993	536	23.1
RADEMA	5,270,185	Margolskee	December 14, 1993	435	91.41
	5,432,263	Haviv et al.	July 11, 1995	530	345
	5,487,993	Hernstadt, et al.	January 30, 1996	435	172.3
	5,498,531	Jarrell	March 12, 1996	435	91.31
	5,523,221	Weiner	June 4, 1996		
	5,573,913	Rosemeyer et al.	November 12, 1996	435	6
	5,595,895	Miki et al.	January 21, 1997		
	5,605,793	Stemmer	February 25, 1997	 	
	5,641,673	Hazeloff et al.	June 24, 1997		
	5,643,766	Scheele et al.	July 1, 1997	435	912
	5,652,116	Grandi et al.	July 29, 1997	435	69.1
	5,660,985	Pieken et al.	August 26, 1997	435	6
	5,667,969	Sullenger et al.	September 16, 1997	435	6
	5,672,491	Khosla et al.	September 30, 1997	435	148
	5,688,670	Szostak et al.	November 18, 1997	+	1.0
	5,698,421	Lambowitz et al.	December 16, 1997	435	91.1
	5,712,146	Khosla et al.	January 27, 1998	435	252.35
	5,716,849	Ligon et al.	February 10, 1998	435	419
	5,780,272	Jarrell	July 14, 1998		
	5,792,607	Backman	August, 1998	435	6
	5,795,738	Grandi et al.	August 18, 1998	435	69.1
	5,804,418	Lambowitz et al.	September 8, 1998	435	69.1
	5,824,513	Katz et al.	October 20, 1998	435	76
	5,824,774	Chappell et al.	October 20, 1998	530	350
	5,827,704	Cease	October, 1998	435	172.3
	5,843,718	Khosla et al.	December 1, 1998	435	69.1
	5,856,144	Mierendorf	January, 1999	435	91.2
	5,869,254	Sullenger et al.	February 9, 1999	435	6
	5,869,634	Lambowitz et al.	February 9, 1999	536	23.1
	5,935,788	Burmer	August 1999	435	6
	6,001,608	Lambowitz, et al.	December 14, 1999	435	91.1
	6,022,731	Khosla et al.	February 8, 2000	435	252.35
	, ,	,	1 . Spracify 5, 2000	700	1 202.00

Form PTO-1449 U:S. Department of Commerce (REV-83) Patent and Trademark Office INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Atty. Docket: 0342941-0043 (HU01594-99/BU98- 63)		pplication /478,263	
		Applicant: Jarrell, et al.			
		•	Filing Date:	Group:	· · · · · · ·
			January 5, 2000		
	6,027,895	Lambowitz, et al.	February 22, 2000	435	6
	6,033,883	Barr et al.	March 7, 2000	435	148
	IT ADDI IO ATIONO				
	NT APPLICATIONS				
Examiner's Initials	U.S. Serial No.	Applicant	Filing Date	Title	
	60,114,909	Jarrell, et al.	January 5, 1999	Combin Biology	
EODEIGN E	ATENT DOCUMEN	TC			
	Document No.		Data	T	4:
(A)	V.S.\	Country	Date	Transla	tion
1 200	BB 0 625 572 B 0 773 294 A2	Europe	14 April 1994		
Lin r		Europe	14 May 1997		
Q.	€P 0 773 294 A3	Europe	17 September 1997		
WY & TRAD	WO 89/05358	International	15 June 1989		
	WO 00/00618	International	6 January 2000		
	WO 91/02077	PCT	21 February 1991		-
	WO 94/16736	PCT	4 August 1994		
	WO 95/10362	International	16 March 1995		
	WO 95/07351	PCT	16 March 1995	-	
	WO 95/08548	International	30 March 1995		
	WO 95/13379	PCT	18 May 1995		
	WO 95/22625	International	24 August 1995		
	WO 97/10362	International	20 March 1997		
	WO 97/20078	International	5 June 1997		
	WO 97/35966	International	2 October 1997		
	WO 98/01546	International	15 January 1998		
	WO 98/13487	International	2 April 1998		
	WO 98/23756	International	4 June 1998		
	WO 98/27203	International	25 June 1998		
	WO 98/27230	International	25 June 1998	X	
	WO 98/31837	International	23 July 1998		
	WO 98/38337	International	3 September 1998		
	WO 98/49315	International	5 November 1998		
	WO 98/51695	International	19 November 1998		
	WO 98/54353	International	3 December 1998		
	WO 98/56943	International	17 December 1998		
	WO 99/02669	International	21 January 1999		
	WO 99/23236	International	14 May 1999		
	WO 99/36546	International	22 July 1999		

			Atty. Docket: 0342941-0043 (HU01594-99/BU98- 63)	In re Application No.: 09/478,263
			Applicant: Jarrell, et al. Filing Date: January 5, 2000	Group:
	WO 99/43854	International	2 September 1999	
Examiner's Initials	OTHER DOCUMEN	ITS (Including Auth	or, Title, Date, Pertinent	Pages, <i>Etc.</i>)
			r Pre-mRNAs" Cell, 61:11	
			nalosporin Biosynthetic Ge	
	Organization, Regu	ation, and Evolution	Annu. Rev. Microbiol, 46	6:461-95, 1992.
		e, 260 :1500-03, Jun	nteraction of Antibiotics wit	in Catalytic Group i
			cid Synthase, a New Hom	ologue of Chalcone
OLP E JO	Synthase, from Hyd 839, 1999.	rangea Macrophylla	Var. Thunbergii", <i>Eur. J. E</i>	Biochem. 263 :834-
MON 5 " 2000	©omponent of the E	Erythromycin-Produci	Active-Site Studies of the ng Polyketide Synthase", 1994.	
FRAT & TRADEM	Aparicio, et al., "The Biosynthetic Gene Cluster for the 26-Membered Ring Polyene Macrolide Pimaricin", The Journal of Biological Chemistry", 274 (15):10133-39, April, 1999.			
	Streptomyces Hygro Polyketide Synthas	oscopicus: Analysis d e", <i>Gene</i> , 169 :9-16, 1		in the Modular
	386, Jan. 25, 1990.	. •	group II intron RNAs in vit	
	Baldwin, T. "Firefly Structure, 4 :223-28		cture is Known, But the My	stery Remains",
		2) Science, 257 :635-		
	Beaudry et al., "Dire 1992.	ected Evolution of an	RNA Enzyme" Science, 2	57 :635-641, Jul. 31,
	1	unctional Chimeric Ment", Chemistry & Bio	lodular Polyketide Syntha <i>logy</i> , 3 (10):1996.	se Generated Via
			nal Fungal Polyketide Syn 2)", <i>Journal of Bacteriology</i>	
			es Sequence Specificity of RNA Enzyme Activity" Ce	
	Cloning of the Structure the Multifunctional E	ctural Gene, Sequend Enzyme",	ynthase 2 From Saccharo ce Analysis and Inferred D	omain Structure of
			dratase Active Site in the E Emical Society Transaction	
	Bibb, et al., "Analys	is of the Nucleotide S	Sequence of the Streptomy bout the Enzymology of P	yces Glaucescens

Form PTO-1	449 U.S. Department of Commerce	Atty. Docket:	In re Application		
(REV-83)	Patent and Trademark Office	0342941-0043	No.: 09/478,263		
	ON DISCLOSURE STATEMENT	(HU01594-99/BU98-	140 00/4/ 0,200		
	of bioceosors of ATEMENT	63)			
(USE SEVERA	ii Sheets ii hecessary)				
		Applicant: Jarrell, et al.	Crount		
		Filing Date:	Group:		
		January 5, 2000			
	Biosynthesis", <i>The EMBO Journal</i> , 8 (9):				
	Blumenthal et al., "Cis and trans mRNA Nov. 1988.		·		
	Blumenthal, Thomas, "Trans-splicing and elegans" TIG, 11(4):132-136, April, 1995	j			
	Blumenthal, Tom, "Mammalian Cells Car 15 (5):347-348, May, 1993.	·			
	Böhm, et al., "Engineering of a Minimal N	Modular Polyketide Syntha	se, and Targeted		
.	Alteration of the Stereospecificity of Poly				
n E	Biology, 5 (8):407-412.				
1 - vc.13	Bonen et al., "Trans-splicing of pre-mRN	A in plants, animals and p	rotists" the FASEB		
-000 11	<i>J.</i> , 7 :40-46, Jan. 1993				
12, 1000 7	Brown, et al., "Aspergillus Has Distinct F	atty Acid Synthases for Pr	imary and Secondary		
1	Metabolism", Proc. Natl. Acad. Sci, USA				
TRACEMAN.	Bryk et al., "Spontaneous shuffling of do	mains between introns of	phage T4" <i>Nature</i> ,		
R TRAN	346 :394-96, Jul. 26, 1990.				
	Buckler et al., "Exon amplication; A strat	egy to isolate mammalian	genes based on		
	RNA splicing" <i>Proc.Natl. Acad. Sci.</i> , 88 :4005-9, May 1991. Burgess et al., "A Mechanism to Enhance mRNA Splicing Fidelity: The RMA-				
	Dependent ATPase Prp16 Usage of a D	iscard Pathway for Aberra	nt Lariant		
	Intermediates" Cell, 73:1377-91, Jul. 2, 1	1993.			
	Burke et al., "Sequences and Classificat	ion of Group I and Group I	I Introns" Meth. in		
	Enzym., 180 :533-45, 1989.				
	Burke, John M., "Sequences and Classif	ication of Group I and Gro	up II Introns" Proc.		
	Natl. Acad. Sci.U.S.A., 85B:533-45, 198				
	Butler, et al., "Impact of Thioesterase Ac		sis in Streptomyces		
	Fradiae", Chemistry & Biology, 6(5):287-				
	Caffrey, et al., "Identification of DEBS 1,		_		
	Polypeptides of the Erythromycin-Produc		rom		
	Saccharopolyspora Erythraea", 304:2,3,				
	Campbell et al., "Alternative Approaches				
	Therapies for Retroviral Infections" Adv.				
	Cane, et al., "Harnessing the Biosyntheti Mutations", Science, 282:October, 1998.		ermutations, and		
	Cane, et al., "Highly Efficient Incorporation	on of Polyketide Chain Elo	ngation		
	Intermediates into 6-Deoxyerthronolide E Journal of Antibiotics 48:7 647-51.				
	Cane, et al., "Polyketide Biosynthesis: M Science, 263 :1994.	olecular Recognition or G	enetic Programming",-		
	Capel et al., "Circular transcripts of the te testis", Cell, 73:1019-1030 (June 4, 1993)		in adult mouse		
· · · · · · · · · · · · · · · · · · ·	Carreras, et al., "The Chemistry and Biol		de, and		

Form PTO-1	1449 U.S. Department of Commerce	Atty. Docket:	In re Application		
(REV-83)	Patent and Trademark Office	0342941-0043	No.: 09/478,263		
, ,	ON DISCLOSURE STATEMENT	(HU01594-99/BU98-	140 00/470,200		
	al sheets if necessary)	63)			
030 307070	in one oto in modelodally)	Applicant: Jarrell, et al.	<u> </u>		
		Filing Date:	Group:		
		January 5, 2000	Croup.		
	Nonribosomal Peptide Biosynthesis", To		188 · 85-126 1007		
	Cech et al., "Self-Splicing of Group I Intro				
	Chapdelaine et al., "The Wheat Mitochor				
	dehydrogenase Complex: A <i>Trans</i> -splic				
	65 :465-72, May 3, 1991.				
	Chuat et al., "Can Ribosymes Be Used to		ne Expressoin?"		
	Biochem. and Biophys. Res. Commun.,		Disambana Olaminali		
	Coljee, et al., "Seamless Gene Engineer Nature Biotechnology, 18 :789-91, 2000	ing Using KNA-and DNA-0	Overnang Cloning",		
		is Gene-In-Pieces" Cell, 6	5 :465-72, May 3,		
Aum.	Ponklin et al., "Multiple trans-splicing even				
HON 2 , 2000	Franscript in a plant mitochondrion" Gene	etics and Devel., Comell U	niv., Ithica, NY		
		icad C. ologona gona into	a conventional gana		
TRADEN	Conrad et al., "Conversion of a <i>trans</i> -spl by introduction of a splice donor site", <i>El</i>				
	Conrad et al., "Insertion of Part of an Intr				
	Caenorhabditis elegans Gene Converts				
	Biol., 11 (4):1921-26, Apr. 1991.	it into a trans opilioca con	c , moroc. arra comar.		
	Conti, et al., "Crystal Structure of Firefly Luciferase Throws Light on a Superfamily of				
	Adenylate-Forming Enzymes", Research		· a caponaning cr		
	Conti, et al.,k "Structural Basis for the Ac		n the Non-Ribosomal		
	Biosynthesis of Gramicidin S", The EMB				
	Cortes, et al., "Repositioning of a Domai				
	Specific Chain Cleavage", Science, 268:	1487-89, 1995.	•		
	Cosmina, et al., "Sequence and Analysis	of the Genetic Locus Res	ponsible fof		
	Surfactin Synthesis in Bacillus Subtilis",	Molecular Microbiology, 8(5): 821-31, 1993.		
	Cotten et al., "Ribozyme mediated destrue 66, 1989.	uction of RNA in vivo", EM	BO J., 8 (12):3861-		
	Couto et al., "A trans-acting suppressor	restores splicing of a yeas	intron with a branch		
	point mutation" Genes & Devel., Cold Sp				
	Cripe et al., "Structure of the Gene for H				
	31 :3777-85, 1992.	•	•		
	Crosby, et al., "Polyketide Synthase Acy	I Carrier Proteins from Stre	eptomyces:		
	Expression in Escherichia Coli, Purificati		•		
	Biophysica Acta 1251 :32-42, 1995.				
	Curcio et al., "Hetrohoming: cDNA-media	ated mobility of group II int	rons requires a		
	catalytic RNA", <i>Molecular Genetics Prog</i> Health.	ram, Wadsworth Center, N	IY State Dept. of		
	Curcio, et al., "Retrohoming: cDNA-Medi Requires a Catalytic RNA", Cell, 84:9-12	•	f Group II Introns		
	Da'Dara et al., "A novel <i>trans</i> -spliced mF		ulus encodes a		
	Da Dara Ct ai., A novel trans-spinced fir	THE THORITON OF THE VOID	and chouses a		

	1440	L Att. Dealest	I la as Assalia stica
Form PTO-1		Atty. Docket:	In re Application
(REV-83)	Patent and Trademark Office	0342941-0043	No.: 09/478,263
	ON DISCLOSURE STATEMENT	(HU01594-99/BU98-	
(Use severa	al sheets if necessary)	63)	
		Applicant: Jarrell, et al.	
		Filing Date:	Group:
		January 5, 2000	
	functional S-adenosylmethionine decarb	oxylase" Biochem. J., 320	:519-30, 1996.
	Dairi, et al., "Development of a Self-Clon	ing System for Actinomad	ura Verrucosospora
	and Identification of Polyketide Synthase		
	Angucyclic Antibiotic Pradimicin", Appl. E		
	Davis et al., RNA Trans-splicing in Flatw	orms" J. Biol. Chem., 270	(37):21813-19, Sep.
	15, 1995.	,	` ' '
	Davis, et al., "The Production of Surfaction	on in Batch Culture by Bac	cillus Subtilis ATCC
	21332 is strongly influenced by the Cond		
	Microbial Technology, 25 :322-29, 1999.		,
	De Giorgi et al., "A silent trans-splicing s	ignal in the cuticlin-encodi	na gene of
	theplant-parasitic nematode <i>Meloidogyn</i>	e artiellia." Gene. 170(2):2	61-65, 1996.
	De Vries et al., "Artificial Exon Shuffling		
PE VC	PA) and Urokinase (u-PA): A comparative		
0	PA/U-PA Hybrid Proteins" Biochemistry,		
	Decker, et al., "Indentification of Streptor		Genes Involved in
May 1	the Production of the Polyketide Elloram		
The case	Dib-Hajj, "Domain 5 interacts with domai		
FIENT & TRADEMI	transesterification reaction of group II int		
	21 (8):1797-1804, Apr. 25, 1993.	. or oen opnenig , was in	
	Dieckmann, et al., "Probing the Domain	Structure and Ligand-Indu	ced Conformational
	Changes by Limited Proteolysis of Tyroo	cidine Synthetase 1". J. Mo	ol. Biol., 288 :129-40,
	1999.	,	
	Dieckmann, et al., "The Adenylation Dor	nain of Tyrocidine Synthet	ase 1 Structural and
	Functional Role of the Interdomain Links		
	Sequence", Eur. J. Biochem. 247:1074-8		,
	Donadio, et al., "Biosynthesis of the Eryt		nd a Rational
	Approach for Producing Hybrid Macrolid	es", <i>Gene</i> , 115 :97-103, 19	992.
	Donadio, et al., "Modular Organization o		
	Biosynthesis", <i>Science</i> , 252 :675-79, 199		
	Donadio, et al., "Organization of the Enz		Itifunctional
	Polyketide Synthase Involved in Erythrol		
	Erythraea", <i>Gene</i> , 111 :51-60, 1992.	•	
	Dorit et al., "How Big Is the Universe of I	Exons?" Sci., 250 :1377-82	., Dec. 7, 1990.
	Doudna et al., "RNA structure not seque		
	a group I intron" Proceedings of the Nati	onal Academy of Science	s, 86 :7402-06, Oct.
	1989.	, , , , , , , , , , , , , , , , , , , ,	
· · · · · · · · · · · · · · · · · · ·	Dube et al. (1989) <i>Biochemistry</i> , 28 (14):	5703-7.	
	Duncan, et al., " A Neurol Basis for Gene		. 289 : 457, 2000.
	Eul et al., "Trans-splicing and alternative		
	mammalian cells generate a truncated S		
	24 (9):1653-61, May 1, 1996.	The Family of Tradit More	,
	Eul, et al., "Experimental evidence for R	NA trans-splicing in mamn	nalian cells" FMBO
L	Lui, et ai., Experimental evidence for N	147 Charle-Spilong in mann	idian colo, ENDO

	1440	1 411 5	<u> </u>
Form PTO-1	•	Atty. Docket:	In re Application
(REV-83) Patent and Trademark Office		0342941-0043	No.: 09/478,263
1	ON DISCLOSURE STATEMENT	(HU01594-99/BU98-	
(Use severa	al sheets if necessary)	63)	
		Applicant: Jarrell, et al.	
		Filing Date:	Group:
		January 5, 2000	
	<i>J.,</i> 14 (13):3226-35, Jul. 3, 1995.		
	Fedorov et al., "Analysis of nonuniformit	v in intorn phase distribution	n" Nucl Acid Res
	20 (10):2553-57, 1992.		
	Franzen et al., "Kinetic analysis of the 5" promoted by domain 5" <i>Nucleic Acid Re</i>	search, 21(3):627-34, 1993	3.
	Fu, et al., "Engineered Biosynthesis of N	•	
1	Two Reactions Catalyzed by a Polyketic		
	Fujii, et al., "Heterologous Expression a		
	Lagenarium Polyketide Synthase Encod	led by the PKS1 Gene Invo	olved in Melanin
	Biosynthesis", Biosci. Biotechnol. Bioche	em. 63 (8):1445-52, 1999.	
	Fuma, et al., "Nucleotide Sequence of 5	' Portion of srfA That Conta	ains the Region
	Required for Competence Establishmen	it in Bacillus Subtilus", <i>Nuc</i>	leic Acids Research,
PE JC	21 (1):93-97, 1993.		
0, ,	Gaisser, et al., "Sugaring the Pill by Des	sign", Nature Biotechnology	/, 16 :19-20, January,
	뜵 1998.		
HOY	Galloway et al., "Deletion-tolerance and	Trans-splicing of the Bacte	eriophage T4 td
Pr MP	Intron" <i>J. Mol. Biol.</i> 211 :537-49, 1990.		
FRAUE TRAUE MA	Garriga et al., "Mechanism of recognitio	n of the 5' splice site in self	f-splicing group I
	introns" <i>Nature</i> , 322 :86-9, Jul. 3, 1986.		
	Ghetti et al.,≀"In vitro trans-splicing in Sa	iccharomyces cerevisiae" I	Proc. Natl. Acad. Sci.
	USA, 92 (25):11461-64, Dec. 5, 1995.		
	Gocht, et al., "Analysis of Core Sequence	이 이번 경기를 가는 것이 없었다. 이 경기를 내려왔다면 되었다. 그렇게 되었다. 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그	
	Multifunctional Peptide Synthetase Tyc	A by Site-Directed Mutager	esis", Journal of
	Bacteriology, 176(9):2654-62, May, 199	4.	
	Gokhale, et al., "Mechanism and Specifi	icity of the Terminal Thioes	terase Domain from
	the Erythromycin Polyketide Synthase",	Chemistry & Biology, 6(2):	117-25
	Goldschmidt-Clermont et al., "A Small C	cholorplast RNA May Be Ro	equired for Trans-
	Splicing in Chlamydomonas reinhardtii"	Cell, 65:135-43, Apr. 5, 19	91.
	Goldschmiti-Clermont et al., "Trans-splic	cing mutants of Chlamydor	nonas reinhardtii"
	Mol. Gen.Genet., 223:417-25, Sep. 199	0.	71.7 - 22-22.2 - 22-22.2
	Graham, et al., "Indentification of Mycob		As Synthesized in
	Response to Phagocytosis by Human M		
	Transcribed Sequences (SCOTS)", Proc	. •	-
!	September, 1999.	ŕ	
	Grangemard, et al., "Lichenysins G, a N	ovel Family of Lipopeptide	Biosurfactants from
	Bacillus Licheniformis IM 1307: Produc		
	and Mass Spectrometry", The Journal o		
	Guo, et al., "Group II Introns Designed to		
	Target Sites in Human Cells", Science,	The state of the s	, i i and i anni e en i i i i
	Haese, et al., "Bacterial Expression of C		nts of the
	Multifunctional Enzyme Enniatin Synthe		
	Hall et al., "Exon shuffling by recombina		
L	Trail et al., Latin Shuming by recombina	mon between sen-splicing i	THEORIS OF

Form PTO-1	449 U.S. Department of Commerce	Atty. Docket:	In re Application	
(REV-83)	Patent and Trademark Office	0342941-0043	No.: 09/478,263	
	ON DISCLOSURE STATEMENT	(HU01594-99/BU98-	,200	
1	l sheets if necessary)	63)		
,		Applicant: Jarrell, et al.		
		Filing Date:	Group:	
		January 5, 2000		
	bacteriophage T4" Nature, 340:574-76, A			
	Haydock, et al., "Divergent Sequence Mo			
	(methyl) Malonyl-CoA:Acyl Carrier Protei		in Modular	
	Polyketide Synthases", FEBS Letters, 37			
	Hazell, et al., "α-Tocopherol Does Not In			
	Apolipoprotein B-100 of Low-Density Lip			
	Hendrickson, et al., "Lovastatin Biosynth			
	Blocked Mutants, Enzyme Activities and	a Multifunctional Polyketic	le Synthase Gene"	
	Chemistry & Biology, 6(7):1999.	fantha ablanalada a Ad	" / Di-/	
	Herrin et al., "trans-splicing of transcripts Chem., 263(29):14601-04, Oct. 15, 1988		gene J. Bioi.	
			ntido V Bosontor	
PEVC	Herzog et al., "Overlapping Gene Structu Subtypes Y1 and Y5 Suggests Coordina 41(3):315-19. May 1997.	te Transcriptional Pogulati	ion" Genemics	
/0.	41 (3):315-19, May 1997.	te Transcriptional Regulati	ion Genomics,	
May 2 " 2000	Eletzer et al., "Trans-activation of group I			
/ MON .	\$86(6623):417-20, Mar 27, 1997.	Tillian splicing by flacical	· · · · · · · · · · · · · · · · · · ·	
Alter Sta	Higuchi, et al., "Using PCR to Engineer [DNA" in PCR Technology.	(Erlich, ed), Stockton	
FIFNT & TRADEN	Press, NY 61-70.	, , , , , , , , , , , , , , , , , , , ,	(=:::::::::::::::::::::::::::::::::::::	
	Holländer et al., "Splicing of the mitochor	ndrial group-II intron rl1: co	onserved intron-exon	
	interactions diminish splicing efficiency"			
	Holzbaur, et al., "Molecular Basis of Celmer's Rules: The Role of Two Ketoreductase			
	Domains in the Control of Chirality by the	e Erythromycin Modular Po	olyketide Synthase",	
	Chemistry & Biology, 6 (4):1999.			
	Hong, et al., "Cloning and Heterologous	Expression of the Entire G	ene Clusters for PD	
	116740 From Streptomyces Strain WP 4			
	Streptomyces Rimosus NRRL 3016", Jou 1997.	umai of Bacteriology, 179 (2	2):470-76, January,	
	Hopwood, et al., "Genes for Polyketide S	Cocondany Metabolic Pathy	vave in	
	Microorganisms and Plants", 89-112.	recondary interaction rathy	vays III	
	Hu, et al., "Repeated Polyketide Synthas	e Modules Involved in the	Biosynthesis of a	
	Heptaene Macrolide by Streptomyces sp			
	72, 1994.	in the second seco	, (.)	
	Hutchinson, C., "Drug Synthesis by Gene	etically Engineered Microo	rganisms",	
	Bio/Technology, 12:375-80.	, ,	-	
	Hutchinson, C., "Microbial Polyketide Syr		rolific", <i>Proc. Natl.</i>	
	Acad. Sci, USA, 96:3336-38, March, 199			
	Ikeda, et al., "Organization of the Biosynt			
	Anthelminitic Macrolide Avermectin in St	reptomyces Avermitilis", P	roc. Natl. Acad. Sci,	
	USA. 96 :9509-14, August, 1999.			
	Jacobsen, et al., "Precursor-Directed Bio		nromycin",	
	Bioorganic & Medicinal Chemistry,6:117		NA 0	
	Jacquier et al., "Efficient Trans-Splicing of	of a Yeast Mitochondrial Ri	NA Group II Intron	

Form PTO-1449 U.S. Department of Commerce (REV-83) Patent and Trademark Office	Atty. Docket: 0342941-0043	In re Application No.: 09/478,263		
INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	(HU01594-99/BU98- 63)			
•	Applicant: Jarrell, et al.			
	Filing Date:	Group:		
	January 5, 2000			
Implicates a Strong 5' Exon-Intron Intera	action" <i>Sci.</i> , 234 :1099-110	4, Nov. 28, 1986.		
Jacquier et al., "Multiple Exon-Binding S 50:17-29, Jul. 3, 1987.				
Jarrell et al., "Group II Intron Domain 5 I and Cell. Biol., 8(6):2361-66, Jun. 1988.				
Jarrell et al., "Group II Intron Self-splicin 1988.				
Jarrell et al., "Inverse Splicing of a Grou 90 :8624-27, September, 1993.				
Jones et al., "Evaluating and enhancing cells" <i>Nature Biotech.</i> , 15 :902-5, Sep. 1	997.			
Jones et al., "Tagging ribozyme reaction cells" Nat. Med., 2(6):643-48, Jun. 1996				
Jendan, et al., "The Biosynthesis of Tetral Medical Programming", Biochemical S	aketides: Enzymology, Me Society Transactions", 21 :2	chanism and 222-28, 1993.		
Host", Science, 265 :509-12, 1994.	a Complete Macrolactone	e in a Heterologous		
Kao, et al., "Evidence for Two Catalytica Functional Modular Polyketide Synthase	e", <i>Biochemistry</i> , 35 :12363	3-68, 1996.		
Katz, et al., "Polyketide Synthesis: Pros Microbiol., 47 :875-912, 1993.	pects for Hybrid Antibiotics	s", Annu. Rev.		
Kealey, et al., "Production of a Polyketic Prokaryotic and Eukaryotic Hosts" <i>Proc</i> 1998.	de Natural Product in Nonp . Natl. Acad. Sci. USA, 95 :	oolyketide Producing :505-09, January,		
Kennedy, et al., "Nurturing Nature: Engi	ineering New Antibiotics",	Nature Biotechnology,		
Khosla, et al., "Generation of Polyketide Tibtech, 14:335-41, September, 1996.	e Libraries via Combinatori	al Biosynthesis",		
Khosla, et al., "Genetic Construction an Synthases Containing Heterologous Ac 175(8):2197-2204, 1993.	yl Carrier Proteins", <i>Journa</i>	al of Bacteriology,		
Khosla, et al., "Targeted Gene Replace Gene Cluster: Role for the Acyl Carrier 1992.	Khosla, et al., "Targeted Gene Replacements in a Streptomyces Polyketide Synthas Gene Cluster: Role for the Acyl Carrier Protein", <i>Molecular Microbiology</i> , 6 (21):3237			
Kim et al., "Pre-mRNA splicing within ar RNA-dependent ATPase and ATP hydr 1993.	rolysis" <i>Proc.Natl. Acad. Sc</i>	ci., 90 :888-92, Feb.		
Kleinkauf, et al., "A Nonribosomal Syste	em of Peptide Biosynthesis	s" Eur. J. Biochem.,		
Kleinkauf, et al., "Linking Peptide and P Antibiotics 48:7, 563-67.	Polyketide Biosynthesis", T	he Journal of		
Knoop et al, "Promiscuous mitochondria	al group II intron sequence	es in plant nuclear		

Form PTO-1449 U.S. Department of Commerce	Atty. Docket:	In re Application			
(REV-83) Patent and Trademark Office	0342941-0043	No.: 09/478,263			
INFORMATION DISCLOSURE STATEMENT	(HU01594-99/BU98-	1,10,1,0,100			
(Use several sheets if necessary)	63)				
	Applicant: Jarrell, et al.				
	Filing Date:	Group:			
	January 5, 2000				
genomes" J Mol Evol.,39(2):144-50, Aug	. 1994.				
Knoop et al., "A tripartite group II intron in Gen Genet., 255 (3):269-76, Dec. 1996.	n mitochondria of an angi	osperm plant" <i>Mol</i>			
Knoop et al., " <i>Trans</i> splicing integrates a in higher plant mitochondria" <i>EMBO J.</i> , 1	l 0 (11):3483-93, 1991.				
Koch et al., "Group II Introns Deleted for Activity" <i>Molec.and Cell. Biol.</i> , 12 (5):195	0-58, May 1992.				
Kohchi et al., "A nicked group II intron ar polymorpha, chloroplasts" Nucleic Acids	Res., 16(21):10025-36, 1	Nov. 11, 1988.			
Koller et al., "Evidence for In Vivo <i>Trans</i> Chloroplasts" <i>Cell.</i> , 48 (1):111-19, Jan. 1	16, 1987.				
Konarska et al., " <i>Trans</i> Splicing of mRNA 1985.	A Precursors In Vitro" Cell	, 42 :165-71, Aug.			
Kracht, et al., "Antiviral and Hemolytic Ad Ester Derivatives", The Journal of Antibio					
Kuhstos, et al., "Production of a Novel Personal Polyketide Synthase", Gene, 183:231-23	olyketide through the Con 36, 1996.	struction of a Hybrid			
	Lal, et al., "Engineering Antibiotic Producers to Overcome the Limitations of Classical Strain Improvement Programs" <i>Critical Reviews in Microbiology</i> , 22 (4):201-55, 1996.				
Lan et al., "Ribozyme-Mediated Repair of Precursors" <i>Sci.</i> , 280 (5369):1593-96, Ju	n 5, 1998.				
Langer-Safer et al., "Replacement of Fin Plasminogen Activator with Plasminoger Feb. 25, 1991.					
Lau, et al., "Dissecting the Role of Acyltr Synthases in the Choice and Stereocher 1643-51, 1999.					
Leadlay, et al., "The Erythromycin-Produ Society Transactions, 21 :218-22, 1993.	icing Polyketide Synthase	", Biochemical			
-3-phosphate dehydrogenase-encoding 121 (2):227-35, Nov 16, 1992.	Lee et al, "Conservation of gene organization and <i>trans</i> -splicing in the glyceraldehyde -3-phosphate dehydrogenase-encoding genes of <i>Caenorhabditis briggsae</i> " <i>Gene</i> ,				
Leenders, et al., "Rapid Typing of Bacillu Metabolites Using Matrix-Assisted Laser Intacts Cells", <i>Rapid Communications in</i>	Desorption/Ionization Managery Mass Spectrometry, 13 :94	ss Spectrometry of 43-949, 1999.			
Liempt, et al., "Principles of the Molecula Peptide Biosynthesis in Integrated Reac 256-59, 1991.	tion Sequences", Biomed	. Biochim. Acta, 50 :			
Chromatography Methods for Biosurfact Chromatography A, 825:149-59, 1998.	Lin, et al., "General Approach for the Development of High-Performance Liquid Chromatography Methods for Biosurfactant Analysis and Purification", Journal of				
Lücke et al., "Spliced leader RNA of tryp	anosomes: <i>in vivo</i> mutatio	onal analysis reveals			

1	1449 U.S. Department of Commerce Patent and Trademark Office ON DISCLOSURE STATEMENT al sheets if necessary)	Atty. Docket: 0342941-0043 (HU01594-99/BU98- 63) Applicant: Jarrell, et al.	In re Application No.: 09/478,263	
		Filing Date: January 5, 2000	Group:	
	extensive and distinct requirements for to 15(16):4380-91, 1996.	<u> </u>	nation" <i>EMBO J</i> .,	
	Luo, et al., "Erythromycin Biosynthesis: I Modular Polyketide Synthase", <i>Bioorgan</i>	ic & Medicinal Chemistry,	4 (7):995-99, 1996.	
	MacNeil, et al., "Complex Organization of the Avermectin Polyketide Synthase", G	ene, 115: 119-125, (1992).		
	Malek, et al., "Evolution of trans-splicing times", <i>Proc. Natl. Acad. Sci. USA.</i> , 94 (2)	2):553-58, Jan 21, 1997.	·	
	Mann, John, "Rules for the Manipulation Marahiel, et al., "Multidomain Enzymes I	nvolved in Peptide Synthes		
OPE CO	European Biochemical Societies, 307(1) Maroney et al., "Intramolecular base pair its 5' splice site is not essential for trans- Dec. 1991.	ring between the nematode		
FATENT & TRANSPIRE	Marsden, et al., "Stereospecific Acyl Tra Polyketide Synthase", <i>Science</i> , 263: 378	-80, 1994.		
W/ & IKI	Metzenberg et al., "Human and fungal 3' splice sites are used by <i>Trypanosoma bi</i> for <i>trans</i> splicing" <i>Mol Biochem Parasitol.</i> , 83 (1):11-23, Dec 2, 1996.			
	Michel et al., "Comparative and functionareview" <i>Gene</i> , 82 :5-30, 1989.			
	Mikheeva et al., "Use of engineered ribo. Proc. Natl. Acad. Sci. USA, 93:7486-749	90 (July 1996).		
	Miller et al., "trans splicing in Leishmania complexes containing the spliced leader 2597-2603, Jun. 1988.	and U2 equivalent RNAs"	Mol Cell Biol., 8(6):	
	Mofid, et al., "Crystallization and Prelimir Phosphopanthetheinyl Transferase of Mo 1098-1100, 1999.	nary Crystallographic Studi odular Peptide Synthetase	es of Sfp: a s", <i>Acta Cryst</i> . D55 :	
	Mohr et al., "Integration of a group I intro a tyrosyl-tRNA synthetase" <i>Nature</i> , 354 (
	Mohr et al., "Integration of a group I intro a tyrosyl-tRNA synthetase" <i>Nature</i> , 354 :	164-67, Nov. 14, 1991.		
	Moore et al., "Site-Specific Modification of Splice Sites" <i>Science</i> , 256 :992-997 (15 N	May 1992).		
	Mootz, et al., "Design and Application of Opinion in Biotechnology, 10 :341-48, 19	99.		
	Mootz, et al., "The Tyrocidine Biosynthes Nucleotide Sequence and Biochemical C Adenylation Domains", <i>Journal of Bacter</i>	Characterization of Function iology, 179 (21):6843-50.	nal Internal	
	Morawala-Patell et al., "Cis- and trans-spexpression of nad2 in wheat mitochondri	a" Mol Gen Genet., 258 (5)	:503-11.	
	Mörl et al., "Group II intron RNA-catalyze	ed recombination of RNA in	vitro Nucleic Acids	

In re Application Attv. Docket: Form PTO-1449 U.S. Department of Commerce No.: 09/478,263 Patent and Trademark Office 0342941-0043 (REV-83) INFORMATION DISCLOSURE STATEMENT (HU01594-99/BU98-(Use several sheets if necessary) 63) Applicant: Jarrell, et al. Group: Filing Date: January 5, 2000 Res., 18(22):6545-51, 1990. Mörl et al., "Integration of Group II Intron bl1 into a Foreign RNA by Reversal of the Self-Slicing Reaction In Vitro" Cell, 60:629-36, Feb. 23, 1990. Mörl et al., "New reactions catalyzed by a group II intron ribozyme with RNA and DNA substrates", Cell, 70:803-810 (Sept. 4, 1992). Mueller et al., "Group II Intron RNA Catalysis of Progressive Nucleotide Insertion: A Model for RNA Editing" Sci., 261:1035-37, Aug. 20, 1993. Murphy et al., "Identification of a Novel Y Branch Structure as an Intermediate in Trypanosome mRNA Processing: Evidence for Trans Splicing" Cell, 47(4):517-525, Nov 21, 1986. Nielsen, et al., "Viscosinamide, a New Cyclic Depsipeptide With Surfactant and Antifungal Properties Produced by Pseudomonas Fluorescens DR54", Journal of Applied Microbiology, 86:80-90, 1999. Ny et al., "The structure of the human tissue-type plasonogen activator gene: Gorrelation of intron and exon structures to functional and structural domains" Proc. Natl. Acad. Sci., 81:5355-59, Sep. 1984. Ohno, et al., "Production of a Lipopeptide Antibiotic, Surfactin, by Recombinant Bacillus Subtilis in Solid State Fermentation", Biotechnology and Bioengineering, 47:209-14, 1995. Olano, et al., "Analysis of a Streptomyces Antibioticus Chromosomal Region Involved in Oleandomycin Biosynthesis, which encodes two glycosyltransferases responsible for glycosylation of the macrolactone ring", Mol. Gen. Genet., 259:299-08; 1998. Oliynyk, et al., "A Hybrid Modular Polyketide Synthase Obtained by Domain Swapping", Chemistry & Biology, 3(10):833-39, 1996. Pasman et al., "Exon circularization in mammalian nuclear extracts", RNA, 2:603-610 (1996).Patel, et al., "Cis-Trans-Splicing and RNA Editing are required for the Expression of nad2 in Wheat Mitochondria", Mol. Gen. Genet. 258:503-11, 1998. Patthy et al., "Intron-dependent evolution: preferred types of exons and introns" FEBS Letters. 214(1):1-7, Apr. 1987. Peebles et al., "Group II Intron Selt-splicing: Development of Alternative Reaction Conditions and Identification of a Predicted Intermediate" Cold Spring Harbor Symp. on Quantitative Bio., LII:223-32, 1987. Peebles et al., "Mutation of the Conserved First Nucleotide of a Group II Intron from Yeast Mitochondrial DNA Reduces the Rate But Allows Accurate Splicing" J. of Biol. Chem. 268(16):11929-38, Jun. 5, 1993. Pereia de Souza et al., "A trans-splicing model for the expression of the tripartite nad5 gene in wheat and maize mitochondria" Plant Cell, 3(12):1363-78, Dec, 1991. Pestov, et al., "Recombinant Polyketide Synthesis in Streptomyces: Engineering of Improved Host Strains", Bio Techniques 26:106-10, January, 1999. Peypoux, et al., "[Ala4], Surfactin, A Novel Isoform From Bacillus Subtilis Studied by Mass and NMR Spectroscopies", Eur. J. Biochem., 224:89-96, 1994.

Form PTO-1	449 U.S. Department of Commerce	Atty. Docket:	In re Application
(REV-83)	Patent and Trademark Office	0342941-0043	No.: 09/478,263
INFORMATIO	ON DISCLOSURE STATEMENT	(HU01594-99/BU98-	
	I sheets if necessary)	63)	
(OSE SEVERA	Tolloolo II liededdal y y	Applicant: Jarrell, et al.	
		Filing Date:	Group:
		January 5, 2000	
	- L "D - L T - L is the Di		54 563
	Peypoux, et al., "Recent Trends in the Bi	ocnemistry of Surfactiff, 5	34-303
		:	do report" Not
	Phylactou et al., "Ribozyme-mediated tra	ans-splicing of a trinucleous	de repeat Ivat
	Genet., 18(4):378-81, Apr. 1998.		
	Pieper, et al., "Arrangment of Catalytic S	ites in the Multifunctional E	Enzyme Enniatin
	Synthetase", Eur. J. Biochem., 230:119-	26, 1995.	· · · · · · · · · · · · · · · · · · ·
	Pieper, et al., "Cell-Free Synthesis of Po	lyketides by Recombinant	Erythromycin
	Polyketide Synthases", Nature, 378:263-	-66, 1995.	
	Pieper, et al., "Erythromycin Biosynthesi	s: Kinetic Studies on a Full	y Active Modular
	Polyketide Synthase Using Natural and	Unnatural Substrates", <i>Bio</i>	chemistry, 35 :2054-
	60, 1996.		
(PEVC)	Puttaraju et al., "Group I permuted intror	n-exon (PIE) sequences se	If-splice to produce
O PE JO	"Arcular evone" Mucleic Acids Res 20(2)	0):5357-64, 1992.	
NOV 2 " 7000	Boberts, et al., "6-Deoxyerythronolide B	Synthase 3 From Sacchar	opolyspora Erythrea:
HOY	Over-Expression in Escherichia Coli, Pu	rification and Characterisa	tion", Biochemical
	&Society Transactions", 1992.		
FANT & TRADE	Roberts, et al., "Heterologous Expression	n in Escherichia Coli of an	Intact Multienzyme
	Component of the Erythromycin-Produci	ing Polyketide Synthase", <i>I</i>	Eur. J. Biochem.
	214 ·305-11, 1993.		
	Rodriguez, et al., "A Cytochrome P450-l	Like Gene Possibly Involve	ed in Oleandomycin
	Biosynthesis by Streptomyces Antibiotic	s", FEMS Microbiology Let	tters, 127 :117-120,
	1995.		
	Ruan, et al., "A Second Type-I PKS Ger	ne Cluster Isolated from St	reptomyces
	Hygroscopicus ATCC 29253, a Rapamy	cin-Producing Strain", <i>Ger</i>	ne, 203 :1-9, 1997.
	Saito, et al., "Entire Nucleotide Sequence	e for Bacillus Brevis Naga	no Grs2 Gene
	Encoding Gramicidin S Synthetase 2: a	Multifunctional Peptide Sy	nthetase'", <i>J.</i>
	Biochem., 116 :357-67, 1994.		
	Saldanha et al., "Group I and group II in	trons" FASEB J., 7 :15-24,	Jan. 1993.
	Salvo et al., "Deletion-tolerance and tran	ns-splicing of the bacteriop	hage T4 td intron" J.
	Mol. Biol., 211(3):537-49, Feb 5, 1990.		
	Sargueil et al., "A Shortened Form of the	e Tetrahymena thermophil	a Group I Intron Can
	Catalyze the Complete Splicing Reaction	n <i>in trans" J. Mol. Biol.</i> , vo	I. 233 (4):629-43, Oct
	20, 1993.		
	Sarver et al., "Ribozyme trans-splicing a	and RNA tagging: Following	g the messenger" <i>Nat</i>
	Med., 2(6):641-42, Jun. 1996.		
	Schmeizer et al., "Self-Splicing of Group	o II Introns In Vitro: Mappin	g of the Branch Point
	and Mutation Inhibition of Lariat Format	ion" <i>Cell</i> , 46 :557-65, Aug.	15, 1 <u>986.</u>
	Schröder, et al., "Plant Polyketide Synth	nases: A Chalcone Synthas	se-Type Enzyme
	Which Performs a Condensation Reacti	ion with Methylmalonyl-Co	A in the Biosynthesis
	of C-Methylated Chalcones", Biochemis	stry, 37 :8417-25, 1998.	
	Schroeder et al., "Splice-Site Selection	and Decoding: Are They R	elated?" <i>Sci.</i> ,
	260 :1443-44, Jun. 4, 1993.	·	

Form PTO-1	449 U.S. Department of Commerce	Atty. Docket:	In re Application			
	Patent and Trademark Office	0342941-0043	No.: 09/478,263			
(REV-83) Patent and Trademark Office INFORMATION DISCLOSURE STATEMENT		(HU01594-99/BU98-	110 00/4/ 0,200			
(Use several sheets if necessary)		63)				
(036 367674	Talloote ii Hooddary)	Applicant: Jarrell, et al.				
		Filing Date:	Group:			
		January 5, 2000				
	Sohunn et al. "A Sorangium Cellulosum		Juster for the			
	Schupp, et al., "A Sorangium Cellulosum (Myxobacterium) Gene Cluster for the Biosynthesis of the Macrolide Antibiotic Soraphen A: Cloning, Characterization, and					
	Homology to Polyketide Synthase Genes From Actinomycetes" Journal of Bacteriology,					
	177 (13):3673-79, 1995.					
	Schwecke, et al., "The Biosynthetic Gene Cluster for the Polyketide					
	Immunosuppressant Rapamycin", <i>Proc. Natl. Acad. Sci, USA</i> , 92: 7839-43, August					
,	1995.					
		cience 257:1489-90. Sep.	11, 1992.			
	Seidel et al., "Exons as Microgenes?" <i>Science</i> , 257 :1489-90, Sep. 11, 1992. Sharp et al., "On the Origin of RNA Splicing and Introns" <i>Cell</i> , 42 :397-400, Sep. 1985.					
	Sharp et al., "Trans Splicing: Variation on the Familiar Theme?" Cell, 50:147-48, Jul. 17, 1987.					
	Shen, et al., "Ectopic Expression of the Minimal WhiE Polyketide Synthase Generates					
	Library of Aromatic Polyketides of Divers					
	USA, 96:3622-27, March, 1999.	·				
OE JC19	· · · · · · · · · · · · · · · · · · ·	nt of Genes for Individual F	Polyketide Synthase			
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	©components in Streptomyces Coelicolar	A3(2) by Heterologous G	enes from a Different			
	Polyketide Pathway", Journal of Bacterio	ology, 174:19, 6184-90, 19	92.			
THE 2 THE	Solnick et al., "Trans Splicing of mRNA Precursors" Cell, 42:157-64, Aug. 1985.					
/ Kin	synthetases Required for Non-Ribosomal Peptide Synthesis", <i>FEMS Microbiology Letters</i> , 125 :3-14, 1995.					
CATENT & TRA						
	Stassi, et al., "Ethyl-Substituted Erythromycin Derivatives Produced by Directed					
	Metabolic Engineering", Proc. Natl., Aca	0. SCI. USA., 95.7305-09,	June 1990.			
	Steitz et al., "Splicing Takes a Holiday" S	SCI., 257:000-09, Aug. 14,	1992.			
	Strauss, E., "Targeting Intron Insertion Into DNA", Science, 289:374, 2000.					
	Sturm et al., "Efficient trans-splicing of Mutated Spliced Leader Exons in Leishmania					
	tarentolae" J. Biol. Chem., 273 (30):18689-92, Jul. 24, 1998. Suchy et al., "Restoration of the Self-splicing Activity of a Defective Group II Intron by					
1	Small Trans-acting RNA" Institut für Ger	netik Mikrobiologie der I Ini	versität München, on			
	179-87, Academic Press Limited 1991.	letik Mikrobiologic der em	voronat marionori, pp.			
	Sullenger et al., "Colocalizing Ribozyme	s with Substrate RNSs to	Increase Their			
	Efficacy as Gene Inhibitors" <i>Applice Biochem. and Biotech.</i> , 54 :57-61, 1995. Sullenger et al., "Ribozymes-mediated repair of defective mRNA by targeted <i>trans</i> -					
	splicing" <i>Nature</i> , 371 , Oct. 13, 1995.		y in general and			
	Sullenger et al., "Tethering Ribozymes to a Retroviral Packaging Signal for Destruction					
	of Viral RNA" Sci., 262:1566-69, Dec. 3, 1993.					
	Summers, et al., "Malonyl-Coenzyme A:	Acyl Carrier Protein Acyltr	ansferase of			
	Strepotomyces Glaucescens: A Possible Link Between Fatty Acid and Polyketide					
	Biosynthesis", <i>Biochemistry</i> , 34 (29):9389-9402.					
	Sutton, et al., "Trypanosome Trans-Splicing Utilizes 2'-5' Branches and a					
	Corresponding Debranching Activity", The EMBO Journal, Vol. 7. pp. 1431-37, 1988.					
	Szostak et al., "Enzymatic activity of the	conserved core of a group	o I self-splicing intron"			
L			· · · · · · · · · · · · · · · · · · ·			

•	49 U.S. Department of Commerce Patent and Trademark Office	Atty. Docket: 0342941-0043	In re Application No.: 09/478,263			
(REV-83) Patent and Trademark Office INFORMATION DISCLOSURE STATEMENT		(HU01594-99/BU98-	140 05/470,200			
	sheets if necessary)	63)				
(OSE SEVERAL	incete ii neecestary)	Applicant: Jarrell, et al.				
		Filing Date:	Group:			
		January 5, 2000				
	Vature, 322 :83-86, Jul. 3, 1986.					
	Tang, et al., "Characterization of the Enzymatic Domains in the Modular Polyketide					
3	Synthase Involved in Rifamycin B Biosynthesis by Amycolatopsis Mediterranei", <i>Gene</i> ,					
	216 :255-65, 1998.					
-	Tasiouka et al., "A modified group I intron can function as both a ribozyme and a 5'					
6	exon in a trans-exon ligation reaction" Gene, 144:1-7, 1994.					
	Thompson, et al., "Identification and Sequence Analysis of the Genes Encoding a					
	Polyketide Synthase Required for Pyoluteorin Biosynthesis in Pseudomonas					
F	Fluorescens Pf-5, Gene, 204 :17-24, 199	7.	- La Tarana Callining			
	Tschudi et al., "Destruction of U2, U4, or		ocks I rans Splicing			
<u> </u>	n Trypanosome Cells" Cell, 61:459-66, I	viay 4, 1990.	of GreB are related			
	Turgay, et al., "Four Homologous Domains in the Primary Structure of GrsB are related					
	to Domains in a Superfamily of Adenylate-Forming Enzymes", <i>Molecular Microbiology</i> ,					
-	6(4):529-46, 1992. Turmel et al., "The <i>trans</i> -spliced intron 1 in the <i>psa</i> A gene of the <i>Chlamydomonas</i>					
	chloroplast: a comparative analysis" Curr Genet., 27 :270-9, 1995.					
OE JC13,	Ullu et al., "Permeable trypanosome cell	s as a model system for tra	anscription and trans-			
/ *	splicing" Nucleic Acids Res., 18 (11):3319-26, 1990. Yater, et al., "The Modular Organization of Multifunctional Peptide Synthetases", Journal of Protein Chemistry, 16 (5):557-64, 1997. Non Ahesen et al. "Footprinting the Sites of Interaction of Antibiotics with Catlytic					
" Min ii						
ournal of Protein Chemistry, 16 (5):557-64, 1997.						
Von Ahesen et al., "Footprinting the Sites of Interaction of Antibiotics with Catlytic Group I Intron RNA" Sci., 260 (12):1500-3, Jun. 4, 1993.						
1	Wallasch et al., "Structural requirements for section of 5'- and 3' splice sites of group II					
	introns" Nucleic Acids Res., 19 (12):3307-14, 1991.					
	Wang et al., "Movement of the Guide Sequece During RNA Catalysis by a Group I					
	Ribozyme" Science, 260 :504-8, Apr. 23, 1993.					
	Watakabe et al., "The role of exon seque Cold Spring Harbor Lab. Press, 7 :407-18		on" Genes & Devel.,			
	Watanabe, et al., "Demonstration of the	Catalytic Roles and Evide	nce For The Physical			
	Association of Type I Fatty Acid Synthases and A Polyketide Synthase in the					
0	Biosynthesis of Aflatoxin B ₁ " Chemistry	and Biology, 3: 463-69, Jur	ne, 1996.			
1	Weinreb, et al., "Stoichiometry and Spec	cificity of In Vitro Phosphop	pantetheinylation and			
	Aminoacylation of the Valine-Activating Module of Surfactin Synthetase", Biochemistry,					
	37 :1575-84, 1998.					
	Weissman, et al., "Evaluating Precursor	-Directed Biosynthesis Tov	vards Novel			
	Erythromycins through In Vitro Studies of	on a Bimodular Polyketide	Synthase", Chemistry			
	& Biology, 5 (12):743-54.	for Fordhornonia Diagrand	posio" Pischomistry			
	Weissman, et al., "Origin of Starter Units	s for Erythromycin Biosynti	iesis , biocriennistry,			
	37 :11012-17, 1998. Weissman, et al., "The Molecular Basis	of Colmar's Rules: The Sta	erenchemistry of the			
	Vveissman, et al., The Molecular Basis Condensation Step in Chain Extension of	on the Frythromycin Polyk	etide Synthase".			
	Biochemistry, 36 :13849-55, 1997.	on the Lighthomyoni i olyk	J. 100 J. 111 1000 1			
1	_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					

Form PTO-1	449 U.S. Department of Commerce	Atty. Docket:	In re Application		
(REV-83)	Patent and Trademark Office	0342941-0043	No.: 09/478,263		
INFORMATION DISCLOSURE STATEMENT		(HU01594-99/BU98-			
(Use several sheets if necessary)		63)			
		Applicant: Jarrell, et al.			
		Filing Date:	Group:		
	•	January 5, 2000			
Winter et al., "The mechanism of group I self-splicing: an internal guide sequence can					
be provided in <i>trans</i> " <i>EMBO J.</i> , 9 (6):1923-28, 1990.					
	Wissinger et al., "Trans Splicing in Oenothera Mitochondria: nad1 mRNAs Are Edited in				
	Exon and Trans-Splicing Group II Intron Sequences" Cell, 65(3):473-82, May 3, 1991.				
	Woodson et al., "Reverse Self-Splicing of the Tetrahymena Group I Intron: Implication				
	of the Directionality of Splicing and for Intron Transposition" Cell, 57:335-45, Apr. 21,				
	1989.				
	Xiang et al., "Sequence Specificity of a Group II Intron Ribozyme: Multiple Mechanisms				
	for Promoting Unusually High Discrimination against Mismatched Targets" Biochem.,				
	37 :3839-49, Feb. 27, 1998.				
	Xue, et al., "A Gene Cluster for Macrolide Antibiotic Biosynthesis in Streptomyces				
	Venezuelae: Architecture of Metabolic Diversity", Proc. Natl. Acad. Sci, USA. 95:				
	12111-116, October, 1998.				
	Yang et al., "Efficient integration of an intron RNA into double-stranded DNA by reverse				
	splicing", <i>Nature</i> , 381 (May 23, 1996).				
	Yu, et al., "Direct Evidence that the Rifamycin Polyketide Synthase Assembles				
100	Polyketide Chains Processively", Proc. Natl. Acad. Sci, USA. 96:9051-56, 1999.				
16 E 00/3	Zhou, et al., "Polyketide Synthase Acyl Carrier Protein (ACP) as a Substrate and a				
(b) " " " " " " " " " " " " " " " " " " "	Catalyst for Malonyl ACP Biosynthesis, Chemistry & Biology, 6 (8):577-84 1999.				
Zimmerly et al., "A Group II intron RNA is a catalytic component of a DNA					
Light S	endonuclease involved in intron mobility", Cell, 83:529-538 (November 17, 1995).				

RECEIVED

NOV 28 2000

TECH CENTER 1600/2900